NOTE XXXI.

A NEW BORNEAN HERPESTES

BY

Dr. F. A. JENTINK.

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The Resident of Palembang, Sumatra, had the kindness to enrich our collections with four Mammals from different parts of his Residency; two are specimens of *Gymnura Rafflesii*, one is a *Cynogale Bennetti* and the fourth a *Herpestes brachyurus*. The species are long-known ones, although not very numerous in the Musea; they therefore still are very welcome additions.

The Controller of the Kikim reports: »that the forestiers »told him that the animal called *Tampeline* (*Gymnura »Rafflesii*) is rather rare in that country; these animals »are living two together in holes on the slope of a pre- »cipice or under the roots of large trees in the virgin »forest, they principally live on small animals (rats, insects »a. s. o.), though they are supposed to live as well on vege- »table matter. My animal however did not like at all the »latter food, but eagerly devored a couple of young mice »which I threw in its dungeon; it only lived two days »in confinment and especially briefly after its dead emitted »a strong onionsmell". As a curiosity he mentioned that its stomach contained a quantum small stones and sand: to these observations I add, that the mentioned small stones have been preserved and are at a number of thirty about, measuring the largest 22×11 mm.!

Dr. B. Hagen (Die Pflanzen- und Thierwelt von Deli auf der Ostküste Sumatra's) observed: »Dieses sonderbare »Thier scheint selten zu sein, denn ich erhielt ebenfalls nur »zwei und zwar lebendige Exemplare, die jedoch auch nur »einige Tage lebten. Sie waren ziemlich träge und schwer- »fällig und hatten ein entschieden nächtliches Gebahren,

»wie sie sich denn auch stets in der dunkelsten Ecke ihres »Käfigs hielten. Sie verbreiteten einen penetranten Geruch".

The other specimen of *Gymnura Rafflesii* has been procured by the Assistent-Resident of Moeara-Doea; according to that gentleman its indigenous name in the Ogan-Oeloe-district is *Rindil*.

The *Cynogale Bennetti*-specimen from the Iliran- and Banjoeasin-district has been sent over to me under the indigenous name *Tikoes-rimbo* = Bush-rat! It lived two days in confinment at the house of the Resident of Palembang; after its dead Dr. van Haak preserved it in spirits; according to Dr. van Haak: »it refused all kind of food, so »that it very likely died by starvation; it emitted no smell".

Dr. B. Hagen (l. c.) had living specimens of *C. Bennetti*, so he observed: »Das Thier befand sich schon über acht »Tage in Gefangenschaft und frass während der Zeit aus»schliesslich Fische, frische sowohl wie getrocknete. Schon »am zweiten Tage seiner Gefangenschaft machte es sich »über dieselben her, sol aber ungemein wild und bösartig »vom ersten bis zum letzten Tage gewesen sein und beim »Herannahen eines Menschen wüthend auf die Stäbe seines »Kerkers losgefahren sein. Sein Freileben wird mir von den »Malaien als das einer richtigen Fischotter beschrieben »und namentlich geleugnet, dass das Thier Früchte fressen »und auf Bäumen umherklettern solle".

The fourth animal is a *Herpestes brachyurus*-specimen, a skin with skeleton; its indigenous name is *Langga-Langga* or *Rangga-Rangga* in the Ogan-Oeloe-district where it has been hunted; the Assistent-Resident at Moeara-Doea writes: »that the animal in preference lives upon trees, »its chief nourishment are fruits, although it likes to seize »a chicken if in retired localities".

Dr. Hagen (l. c.) once had a fresh specimen of this species; he remarked: »Wie mir der, das Fell präparirende, »Mann erzählte, verbreitete das Thier einen erschrecklichen »Gestank, so dass er seine Arbeit im Freien verrichten »musste. Nach Aussagen der dort lebenden Malaien soll

»das Thier nicht gar zu selten sein und bei Verfolgung »oder Annähering eines Feindes eine öla tige, entsetzlich »stinkende Flüssigkeit diesem entgegenspritzen, deren Ge»ruch noch tagelang an den Kleidern haftet".

It seems that never a skeleton of *Herpestes brachyurus* has been procured, at least I find it mentioned in no description nor catalogue. It therefore is very interesting that we now can compare the bony parts of our animal with the same parts in other *Herpestes*-species; as its name is *brachyurus* = *shorttailed*, we may suppose that the tail-vertebrae are much less in number than in the other *Herpestes*-species. The following skeletons have been recorded:

Royal college of Surgeons London.	*H.*	*griseus*	13,7,3
„ „ „ „ „	„	„	13,7,3,21 (?)
After Cuvier and Rüppell. . . .	„	*ichneumon*	14,6,3,29
Rüppell. Abyss. Wirbelthiere . .	„	*gracilis*	14,6,3,25
„ „ „ . .	„	*sanguineus*	15,5,3,22
Wagner. Schreber's Säugethiere .	„	*galera*	14,6,3,29
Leyden Museum.	„	*gracilis*	13,7,3,31
„ „	„	„	13,7,3,31
„ „	„	*galera*	13,7,3,27
„ „	„	*pluto*	14,7,3,26
„ „	„	*pulverulentus*	13,7,3,26 (?)
„ „	„	„	13,7,3,25 (inc.)
„ „	„	„	13,7,3,18 (inc.)
„ „	„	*griseus*	13,6,3,20 (inc.)
„ „	„	„	13,7,3,25 (inc.)
„ „	„	*javanicus*	13,7,3,24 (inc.)
„ „	„	*brachyurus*	14,6,3,21

And as far as we can judge after this small and bad material it seems indeed that *H. brachyurus* has the smallest number of tailvertebrae; further it appears from the above list, that it has with *ichneumon*, *gracilis*, *galera* and *pluto* in common 14 thoracic or dorsal and 6 lumbar vertebrae, that *sanguineus* has 1 thoracic vertebra more than all other species and 1 lumbar less, meanwhile a *H. griseus*-skeleton in the Leyden Museum has 1 lumbar vertebra less than the other ones and that *pluto* presents $14 + 7 = 21$ thoracic + lumbar vertebrae, instead of $14 + 6$ or $13 + 7 = 20$, as in its fellow-species.

In comparing the skull of the Palembang-specimen with the other skulls of *brachyurus* in our collection, I saw that it agrees with them all, except with the skull of a specimen presented by Mr. Ch. Hose to our Museum. As the differences between the skull of the latter specimen and the other ones are so numerous and so very striking, and as the skin belonging to that skull differs in many points from the other skins, I think I am forced to regard upon it as the type of another species. The material of the true *H. brachyurus* at my disposal, all skins with skull, is:

a. ♂ ad. Borneo. Dr. Nieuwenhuis.
b. ♀ » » »
c. ♂ ad. » Waterstradt.
d. ♂ » Dr. Büttikofer.
e. ♂ Sumatra. v. Ryn v. Alkemade.
f. ♀ ad. » Dr. Hagen.

The skulls of *a*, *c*, *e* and *f* have all traces of sutures vanished by growing, I therefore call them *adult*, meanwhile the skulls of *b* and *d* show clearly all sutures notwithstanding they are of the very size of the adult skulls; I therefore call them *fullgrown* but *not adult*. The chief difference between the adult and fullgrown ones further is that in the latter the orbits form not yet a closed ring and that they have the skull less broad than in the adult ones; the lower jaws are all alike. I see no noticeable differences in the skulls between males and females. And now it is very interesting to observe, that Hose's specimen the type of a new species, which I propose to baptize

Herpestes Hosei, n. sp.

shows besides a distinct coloration (see description of it below) a quite differently looking skull; the absence of sutures, combined with complete orbits and used molars, indicates that it belongs to an adult specimen; however the skull is smaller than in *brachyurus* and the lower-jaw presents a much distinct aspect:

	brachyurus.	*Hosei.*
greatest length of skull . .	93 mm.	83 mm.
greatest broadness of skull .	53 »	46 »

More striking still is a comparison of the lower-jaws; I have here figured the lower-jaws of

a. H. Hosei ♀ ad. *b. H. brachyurus* ♀ fullgrown. *c. H. brachyurus* ♂ ad.

We see that notwithstanding *b* is younger than the very adult *c* — molars very used! — they both agree in general shape and size, sothat it is evident that they belong to the same species, but how differently shaped is *a* and especially its posterior part; its dentition is much more used than that of *b*, the jaw of *a* however on the whole is much smaller; the coronoid process of *b* and *c* is very broad and more broadly rounded off, that of *a* is less stout and more pyramidically shaped, with vertical sides; consequently is the shape of the arch from the coronoid process to the condyle a quite different one; the arch lying between the condyle and the angle is less deep and much wider in *a* than in *b* and *c*. I may mention here that the lower jaw of *H. brachyurus* twice has been figured, namely in the »Zoology of the voyage of H. M. S. Samarang" and in »de Blainville's ostéographie", and that both figures agree quite well with our figures *b* and *c*.

Externally *H. Hosei* presents some very striking characteristics; the general colour is more brownish red than in *brachyurus* originating from *Hosei* having shorter hairs, so that meanwhile both species show the same subapical ring to each hair, the black colored part of each hair is much longer in *brachyurus* and for that reason the animal makes a much darker impression. Another important character is that meanwhile *brachyurus* has the claws curved, in *Hosei* the claws are more strait and slender, nay somewhat larger.

This specimen, the type of *Herpestes Hosei*, has been collected by Mr. Charles Hose on the Baram-river and he kindly presented it in 1893 to our Museum.